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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,816	04/19/2001	Hironori Osuga	33036W038	6211

7590

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EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 07/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/807,816

Applicant(s)

OSUGA, HIRONORI

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

This is responsive to the Request for Continued Examination and the amendment filed June 16, 2003 (Paper Nos. 8 and 9).

Newly submitted claim 12 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The invention of claims 1-11 and that of claim 12 are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product such as a method of adhering two substrates.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 12 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "so-called area mounting type" used to characterize the semiconductor devices in claim 1, line 2 is not concise because the term "so-called" calls into question whether or not the means of mounting is accurately designated as "area mounting." The deletion of the term "so-called" would resolve this issue.

The biphenyl epoxy resin of claims 8 and 9 is not clearly defined by the term "type" which embraces derivatives and modifications not contemplated. The deletion of the term "type" would overcome this problem.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 10 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shiobara et al. '266.

Claims 1, 2, 4, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Japanese '444, '631, '938, '490 or '491.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Takami et al.

Claims 1-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fujii et al.

Claims 1, 2, 4, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shiobara et al. '774.

Claims 1, 2, 4, 6, 8 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okuse et al. or Arai et al. '978.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai et al. '908.

The rejections are maintained for the reasons of record set forth in the previous Office actions. The arguments filed June 16, 2003 have been considered but are unpersuasive.

Shiobara et al. '266 (col. 11, lines 54-57), Japanese '444 (abstract, lines 9-11), Japanese '631 (ST section, line 1), Japanese '938 (page 2, line 1), Japanese '490 (abstract, lines 14-15), Japanese '491 (abstract, lined 13-14), Takami et al. (col. 16, lines 41-45 and 64-67), Fujii et al. (col. 7, lines 1-9), Shiobara et al. '774 (col. 11, lines 11-19), Okuse et al. (col. 28, lines 6-11), Arai et al. 978 (col. 12, lines 42-45) and Arai et al. '908 (col. 18, lines 16-20) show the mounting of a semiconductor on one side of a printed circuit board or metallic lead frame and encapsulation with the epoxy resin composition only on the side of the mounted semiconductor.

The claimed use of the composition for the area mounting of semiconductors on one side of a printed circuit board or metallic lead frame is merely the ultimate intended utility of the composition which is not a critical limitation to the claims.

Fujii et al., Arai et al. '978 and the Japanese patents acknowledge reduced warpage accruing from the formulations in one-sided encapsulation configurations.

The compositions exemplified in the references contain naphthalene or biphenyl epoxy resins, and aralkyl or naphthol aralkyl phenolic resins having the identical structures as those exemplified on pages 14 and 18 of the specification, the identical type of triphenylphosphine curing accelerator, and the equivalent type of fused silica filler formulated for the identical utility of one-sided encapsulation of semiconductors. Accordingly, the applied prior art inherently satisfies the expressions denoted in claim 1, lines 7-10 that define the extent of warpage, especially Fujii et al., Arai et al. 978 and the Japanese patents which explicitly cite the reduced warpage emanating from their encapsulants.

Comparative Examples 2, 5 and 6 do not reflect the exemplified formulations of the applied prior art. None of the evidence establishes the lack of satisfaction of the claimed expressions for the compositions exemplified in the cited patents which is the burden proof in accordance with In re Fitzgerald, 205 USPQ 594, CCPA 1980 and MPEP §§ 2112-2112.02.

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